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ABSTRACT

The primary purposes of this study were to establish the validity of the Gibson and Dembo (1984) teacher efficacy scale (modified for use by resource-room teachers) and to examine the association between resource-room teacher efficacy and the reported frequency and utility of the instructional supervision these teachers received. The 580 Maine resource teachers who participated completed a survey rating teacher efficacy (personal and general) and the frequency and utility of supervision they received. Results indicate that the perceived utility of supervision, not its frequency, significantly predicted teacher efficacy in this group. That is, teachers who felt their supervision was "helpful" tended to report a higher sense of teacher efficacy than those who reported less positive views of the supervision they received. This finding held irrespective of sex, age, or job satisfaction, each of which significantly and positively predicted teacher efficacy in its own right. Two tables provide descriptive statistics and the multiple regression analysis. A modified 30-item teacher efficacy scale is appended. (SM)

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Teacher efficacy, supervision, and the special education resource-room teacher

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Introduction

We had two objectives in conducting the analyses we report below: (a) to establish the validity of the Gibson and Dembo (1984) teacher efficacy scale, which we modified for use in the special education resource-room context; and (b) to determine the association between resource-room teacher efficacy and the reported frequency and utility of the instructional supervision these teachers received.

We begin with a brief description of the teacher efficacy construct and the associated research, followed by the methodology and results of the present study. We conclude by considering the more salient implications for subsequent research on teacher efficacy among special-education teachers.

Background

The 1980s witnessed a flurry of research activity devoted to the study of teacher efficacy, or, as Dembo and Gibson (1985, p. 173) defined the construct, "the extent to which teachers believe they can affect student learning." Those who study teacher efficacy almost invariably acknowledge their theoretical debt to Bandura (1977) for his work on self-efficacy.

Bandura argued that human behavior is influenced both by one's outcome expectation--"a person's estimate that a given behavior will lead to certain outcomes"--and by ones' efficacy expectation--the "conviction that one can successfully execute the behavior required to produce the outcome" (p. 193). Within the context of teaching, an outcome expectation would be conveyed by the teacher who, say, believes that skillful instruction can offset the effects of an impoverished home environment. An efficacy expectation, in contrast, would be suggested

by the teacher's confidence that he or she personally is capable of such instruction. While the first kind of expectation signals one's sense of what Denham and Michael (1981) have called the "normative" teacher (p. 41), the second reflects one's sense of personal agency. Teacher efficacy researchers have labeled these two kinds of beliefs in various ways; we will use, respectively, "general efficacy" and "personal efficacy." (See Woolfolk, Rosoff, & Hoy [1991] for additional discussion of the nature of this distinction.)

Gibson and Dembo (1984) developed and validated a measure of teacher efficacy that overcame the problems characterizing earlier attempts at instrumentation in this area (e.g., see Ashton & Webb, 1986; Fink, 1988). In addition to being longer (30 items) and more reliable than earlier instruments, the Gibson and Dembo instrument has a factor structure consistent with the two-dimension conceptualization of teacher efficacy. Further, research by Gibson and Dembo and by others has shown this measure of teacher efficacy to correlate substantively with student achievement, as well as with teacher behaviors and school characteristics known to foster student achievement. (For example, see the literature reviews in Ashton [1984, 1985], Dembo and Gibson [1985], and Woolfolk and Hoy [1990].)

Unfortunately, what we know--and don't know--about teacher efficacy is limited to regular-education settings. Indeed, it is this context to which teacher efficacy research largely has been limited. Given the unique pedagogical demands facing resource teachers and, further, the arguable importance of a strong sense of efficacy for this kind of teacher, the absence of teacher efficacy research in this instructional context is surprising.

The present study

The primary objective of our investigation was to address this void. Specifically, we modified the Gibson and Dembo instrument so that it could be administered to resource teachers. The validity of the modified scale was then assessed by comparing it's factor structure to that obtained when administered to regular-education teachers, as reported by Gibson and Dembo (1984) and Coladarci (1986).

Our secondary objective was to pursue additional correlates of teacher efficacy. In particular, we examined the relationship between teacher efficacy and the frequency and utility of supervision these teachers reported to have received. Although Glickman (1990, p. 22) has proposed a causal link between direct supervision and teacher efficacy, the empirical basis for this proposition appears to be two dissertations and one study of a single teacher (Glickman & Bey, 1990). And in none of these studies is it clear that "teacher efficacy" is equivalent to the more prevalent view of teacher efficacy, as discussed, say, by Ashton and Webb (1986) or Dembo and Gibson (1985). For example, while the prevailing view focuses on the teacher's sense of personal agency for effecting change in the individual student, the few studies described by Glickman and Bey examined teachers' sense of their "competence" or "influence on school practice" (p. 551). Finally, no research on the relationship between supervision and teacher efficacy--however conceptualized--can be found within the resource-room context.

Method

Subjects

All resource teachers in Maine were mailed a survey inviting them to participate in the present study; roughly two thirds agreed (67%, N =

580). Among these 580 resource teachers, the modal teacher was a woman with a baccalaureate, who was between 30 and 39 years of age, and who had been teaching in the resource room for 6 to 10 years. This demographic profile was comparable to that of the population of resource teachers in Maine, as determined from state department documents.

Instruments

Teacher efficacy. In most cases, modifying the Gibson and Dembo instrument simply entailed changing the term "teacher" to "resource-room teacher," or, similarly, "classroom" to "resource room." We also corrected several semantic awkwardnesses (e.g., "he/she"), as well as substituted the two efficacy items from the seminal Rand study (Berman & McLaughlin, 1977) for two items on the Gibson and Dembo instrument judged to be equivalent (their #15 and #16). All responses were restricted to a six-point scale, where the extremes were "strongly disagree" and "strongly agree," respectively.

As an example, consider the following item: "If I really try hard, I can get through to even the most difficult or unmotivated student." By agreeing with this statement, a teacher is expressing a sense of personal efficacy. The following item, in contrast, is designed to tap the teacher's sense of general efficacy: "Even a resource-room teacher with good teaching abilities may not reach many students." Here, general efficacy is conveyed by the teacher who disagrees with the statement. The modified 30-item teacher efficacy scale is presented in the appendix.

Supervision. Resource teachers also were asked to rate the frequency and utility of the supervision they received. Two domains of supervision were specified: (a) formal observation, where classroom

observations are scheduled at a predetermined time for identifying instructional strengths and weaknesses; and (b) performance consultation, which represents informal, perhaps spontaneous, exchanges between a resource teacher and supervisor about instructional practices. Further, separate ratings were sought for each of the following possible supervisors: building principal, special education director, curriculum coordinator, superintendent, assistant superintendent, and any "other" supervisor.

Supervision frequency was assessed through a Likert-type scale ranging from 1 ("never") to 7 ("weekly"); the utility scale ranged from 1 ("not helpful at all") to 5 ("extremely helpful"). By considering the frequency and utility of both domains of supervision, we hoped to get at the "assistance, monitoring, observing, and dialogue" function of supervision (Glickman & Bey, 1990, p. 549).

Results

First we present the results from the teacher efficacy analyses. We begin by considering some descriptive analyses and then move into the factor analysis of the modified teacher efficacy scale. This is followed by the results bearing on the relationship between resource teachers' sense of efficacy and the frequency and utility of the supervision they received.

Teacher efficacy

Descriptive analyses. For descriptive purposes, we reduced each item to a dichotomy: 1 if the teacher "strongly," "moderately," or "slightly" disagreed with the statement and 2 if the teacher "strongly," "moderately," or "slightly" agreed with the statement. A simple examination of the resulting item distributions nicely captures the

variability among these resource teachers in their efficacy beliefs (see appendix). Consider the following personal-efficacy item, which is one of the two items from the Rand study (Berman & McLaughlin, 1977):

- If I really try hard, I can get through to even the most difficult or unmotivated student."

Here, one in every four (26%) resource teachers disagreed with this statement (again, either "slightly," "moderately," or "strongly"). Even greater variability was found on the two items below:

- The time spent in my resource room program has little influence on students compared to the influence of their home environment.

- Even a resource-room teacher with good teaching abilities may not reach many students."

For both items, maximum variability was observed: Half of the resource teachers agreed while half disagreed. Not all items demonstrated such variability, however. For example, 81% of teachers disagreed with the following general-efficacy statement, which was derived from the second Rand item:

- When it comes right down to it, a resource-room teacher really can't do much because most of a student's motivation and performance depends on the home environment.

Going beyond these item-level observations, we reversed the scales of negatively worded items (those appearing in bold face in the appendix) and then determined the percentage of items with which each teacher agreed. If one infers an efficacy belief where a teacher agreed--to any extent--with a statement, our percentage-agreement measure can be regarded as a summary indicator of teacher efficacy across all 30 items.

Consistent with the item-level variability observed above, considerable variability was found on this summary measure, as well. Indeed, some teachers agreed with fewer than one quarter (23%) of the efficacy statements, while others agreed with all 30. The average teacher agreed with almost three quarters of these statements ($\underline{M}$ = 72.50, $\underline{SD}$ = 11.70).

These figures, it will be recalled, were based on dichotomous coding for the 30 teacher efficacy items. Using the full six-point scale, we obtained a mean of 4.25 ($\underline{S}$ = .45). That is, the average teacher tended to agree "slightly" to "moderately" with these efficacy statements (again, after the scales for negatively worded items had been reversed). While it is difficult to appraise either figure -- 72.50 or 4.25 -- in the absence of an accepted standard, the average resource teacher clearly was expressing an efficacy sentiment to more items than not.

Factor analysis. We conducted a principal components factor analysis of the modified teacher efficacy scale and, consistent with the prevailing conceptualization of teacher efficacy, forced the solution to two orthogonal factors. The full six-point scale was used is this analysis.

As noted above, we compared our results to those reported in two studies involving regular education teachers: Gibson and Dembo (1984) and Coladarci (1986). The former study was selected because it was the original factor analysis attending the publication of the Gibson and Dembo scale. And the latter study was chosen because, like the current investigation, it was based on a representative sample of a known population (and involving the same state).

Roughly 28% of the total item variance in the present study was explained by these two factors, which is comparable to the 29% and 27% reported by Gibson and Dembo (1984) and Coladarci (1986), respectively. Accounting for 17% of item variance, the first factor clearly represented a resource teacher's sense of <u>personal efficacy</u>. For example, the three items below were among those with the highest factor loadings:

- When any of my students show improvement, it is because I found better ways of teaching them.

- If my supervisor suggested that I change some of my class curriculum, I would feel confident tnat I have the necessary skills to implement the change.

- If one of my special education students couldn't do a class assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty.

Interestingly, 12 of the 13 items that loaded on this factor also loaded on the comparable factor in at least one of the two comparison studies; eight of these items loaded in both. The remaining item loading on this factor, while not common to either comparison study, nonetheless reflects the notion of personal efficacy:

- If parents comment to me that their child behaves much better in my resource room program than at home, it would probably be because I have some specific techniques of managing their child's behavior which they may lack.

Accounting for 11% of total item variance, the second factor comprised general efficacy items, although not uniformly so. Here, the three highest-loading items were:

- When it comes right down to it, a resource-room teacher really can't do much because most of a student's motivation and performance depends on the home environment.

- The amount that a special education student will learn is primarily related to family background.

- The time spent in my resource room program has little influence on students compared to the influence of their home environment.

For this factor, nine of the 11 items also loaded on the general-efficacy factor in at least one of the two comparison studies; five of

these items loaded in both. The two remaining items loading on this factor are not common to either comparison study. One of these items appears to represent personal efficacy (in this case, its absence):

- If one of my new resource room students cannot remain on task for a particular assignment, there is little that I can do to increase that student's attention.

This errant item notwithstanding, our factor analysis of the modified teacher efficacy scale, when administered to resource teachers, produced a factor structure comparable to that reported by Gibson and Dembo (1984) and Coladarci (1986) in their studies of regular-education teachers. However, the errant item underscores an emerging question in the teacher efficacy literature: What, in fact, does the general efficacy factor really represent? We return to this question in our final discussion. But because our data sustain the concern about the meaning of "general efficacy" (e.g., Coladarci, 1991; Woolfolk and Hoy, 1990), we did not include this factor in the analyses below.

Teacher efficacy and supervision

First we briefly present descriptive information bearing on the frequency and utility of supervision these resource teachers report to have received. (Interested readers should consult Breton [1987] and Breton and Donaldson [in press], where these and related data are presented in greater detail.) Following these descriptive data are the results of the regression analyses, where teacher efficacy served as the dependent variable.

Supervision frequency and utility. Forty five percent of these teachers reported that either the principal or special education director conducted formal observations in their classroom; an additional 30% were observed by both supervisors. Interestingly, 17% of the resource teachers indicated that they were not observed by any supervisor. Observations, when they did occur, typically were conducted on an annual basis, although some teachers were observed semi-annually or more. The modal teacher found observations to be "somewhat" helpful, with special education directors receiving slightly higher ratings than principals.

A similar picture emerged regarding the informal consultation these resource teachers received about instructional issues. For example, 43% of the teachers reported that either the principal or special education director provided such consultation, 33% received consultation from both supervisors, and 18% received no such consultation. Interestingly, ratings of the frequency and utility of informal consultations tended to be generally higher than those for formal classroom observations.

Regression analyses. Ordinary least squares regression was employed to examine the extent to which the frequency and utility of supervision predicted teacher efficacy. The dependent variable, teacher efficacy, was constructed in two ways: (a) total efficacy, obtained by summing a teacher's responses across all 30 items on the modified teacher efficacy scale (Cronbach's α = .77), and (b) personal efficacy, the sum of 13 items loading on the first factor (Cronbach's α = .75). The full six-point scale of each item was used in creating these composites; negatively worded items were recoded.

We considered six independent variables. Frequency and utility of supervision were assessed by, respectively, (a) the mean of a teacher's frequency ratings across domains and across supervisors and (b) the mean of a teacher's utility ratings--again, across domains and supervisors. Several teacher characteristics also were considered: sex, age, resource-room tenure, and job satisfaction (a composite derived from questions regarding the teacher's satisfaction with the current position and commitment to special education). Means, standard deviations, and intercorrelations are presented in Table 1.

In separate equations, each of the teacher efficacy measures was regressed on the six independent variables. The regression equations produced similar results, whether the dependent variable was total efficacy or personal efficacy (see Table 2). First, both multiple correlations were modest, if statistically significant ($\alpha = .05$): .36 for total efficacy and .31 for personal efficacy. Thus, between 10% and 13% of the variance in teacher efficacy was explained by the linear combination of the six independent variables, depending on which dependent variable was used.

Second, the same variables across both equations significantly, if weakly, predicted teacher efficacy. Perhaps the most important finding from these regressions was that, between the two supervision variables, it was the perceived utility of supervision--not its frequency--that significantly related to a teacher's sense of efficacy.

Both regression equations also indicated that higher teacher efficacy was observed among women and those who expressed higher satisfaction with their resource-room position. Interestingly, while age was related to teacher efficacy, resource-room tenure was not:

Irrespective of resource-room experience, older teachers demonstrated slightly higher teacher efficacy.

Summary and Discussion

Our concluding remarks focus on the level of teacher efficacy among resource teachers in our sample; the factor structure of the teacher efficacy instrument, modified for the resource-room context; and the relationship between supervision and teacher efficacy.

Teacher efficacy among resource teachers

We found our sample of resource teachers to vary considerably in their reported sense of teacher efficacy: Some teachers agreed with fewer than one quarter (23%) of the (recoded) efficacy statements, while others agreed with all 30 statements. The average teacher agreed with almost three quarters ($\underline{M}$ = 72.50%) of the efficacy statements.

The number of studies on teacher efficacy notwithstanding, there, alas, is yet any standard by which to judge the level of teacher efficacy in any one sample. While "72.50%" indicates that the average resource teacher in our sample was expressing an efficacy sentiment to more statements than not, the extant literature does not allow us to appraise the relative value of this figure. Thus as a normative question, whether 72.50% is "good" or "high" simply cannot be answered. The same uncertainty surrounds the evaluation of "4.25," the mean based on the full six-point scale. Clearly, we need additional studies--involving similar analyses on similar samples--before we can approach this question with any confidence. And this is particularly true with respect to studies of teacher efficacy in the special education context.

As a point of reference, however, our data can be compared to those obtained by Coladarci (1986), who administered the Gibson and Dembo

instrument to a representative sample of regular education teachers in Maine. Within that sample, a mean of 4.11 ($\underline{S}$ = .45) was obtained across the 30 items. The difference between these two sample-means (i.e., 4.25 vs. 4.11) corresponds to a statistically significant effect size of +.31. That is, the sense of efficacy among resource teachers in Maine is, on the average, roughly one third of a standard deviation higher than that of their regular-education colleagues. Perhaps this preliminary finding reflects the differences between these two educational contexts in how instruction is planned, delivered, and evaluated. One the other hand, this finding simply might be revealing the entering characteristics of those who elect to become special education teachers. Either conjecture, of course, must be tested more systematically in subsequent studies.

Factor structure of teacher efficacy

When the Gibson and Dembo (1984) teacher efficacy scale is modified for use in the resource-room context, a factor structure emerges that is comparable to that found in studies of regular-education teachers (Gibson & Dembo, 1984; Coladarci, 1986).

Personal efficacy. A "personal efficacy" factor clearly surfaced in the present study. As in both comparison studies, this factor is characterized by items that capture the teacher's sense of personal agency (e.g., "When any of my students show improvement, it is because I found better ways of teaching them."). The presence of a personal-efficacy factor among resource teachers suggests the plausibility of pursuing lines of teacher efficacy research similar to those being conducted in the regular-education context (see Ashton, 1984, 1985; Dembo & Gibson, 1985; and Woolfolk et al., 1991.)

General efficacy. As reported above, the second factor--general efficacy--does not enjoy the same clarity of definition. To be sure, some of the items loading on this factor, like the one below, reflect one's view of the "normative teacher" (Denham & Michael, 1981, p. 41):

- When it comes right down to it, a resource-room teacher really can't do much because most of a student's motivation and performance depends on the home environment. (emphasis added)

However, consider the following item, which loads on the general-efficacy factor in the present study and, in an equivalent form, in both comparison studies:

- The time spent in my resource room program has little influence on students compared to the influence of their home environment. (emphasis added)

Does this clearly reflect one's sense of the normative teacher? The use of the possessive my would seem to complicate such an interpretation. And this general-efficacy factor is confounded further by an additional item involving self-referent language:

- If one of my new resource room students cannot remain on task for a particular assignment, there is little that I can do to increase that student's attention. (emphasis added)

In short, this factor analysis suggests that a measure of the resource teacher's sense of efficacy presents the same problem facing those who study teacher efficacy in the regular-education context. Specifically, the meaning of general efficacy remains to be clarified.

Just what is "general efficacy" a measure of? Some researchers have argued that general efficacy, rather than reflecting outcome expectations or the normative teacher, is more indicative of a teacher's pupil-control ideology, bureaucratic orientation, and fundamental attitude toward education (Woolfolk & Hoy, 1990; Woolfolk et al., 1991). Clearly, more quantitative research is needed that examines the convergent and discriminant validity of teacher efficacy scales (e.g., Fink, 1988; Woolfolk et al., 1991).

But this area of research also would profit from more studies with a decidely qualitative orientation. For example, Coladarci (1991) has called for research employing a "think aloud" methodology in which teachers' thoughts are probed as they respond to teacher efficacy items. Think-aloud studies would throw needed light on the kinds of factors, considerations, standards, and so forth, that teachers invoke as they consider statements on a teacher efficacy instrument. A comparison of teachers' thoughts to nominally "personal" vs. nominally "general" efficacy statements would add considerably to our understanding of the meaning and import of the two teacher efficacy constructs.

Supervision and teacher efficacy

The perceived utility of supervision--not its frequency--significantly predicted teacher efficacy among resource teachers in Maine. That is, teachers who felt their supervision was "helpful" tended to report a higher sense of teacher efficacy than those who

reported less positive views of the supervision they received. And this held irrespective of sex, age, or job satisfaction--each of which significantly (and positively) predicted teacher efficacy in its own right.

But these are weak effects. For example, only 13% of the variance in total efficacy, and 10% in personal efficacy, was accounted for by the six independent variables. And in each equation, the regression weight for supervision utility was a modest $\beta = +.13$. That is, with each standard-deviation increase in supervision utility, teacher efficacy increases only 13% of a standard deviation. While this statistic is within the range of effects that characterize the teacher efficacy literature to date (Coladarci, 1991), its magnitude nonetheless raises questions about the import of direct supervision for the development of a teacher's sense of efficacy.

However, one also must address at least two methodological factors that arguably served to constrain the relationship between supervision utility and teacher efficacy in the present study. First, measures of association are affected by variance: Where variance is limited, coefficients are attenuated. This doubtless is a problem in studying instructional supervision among resource teachers, a population that in Maine (Breton & Donaldson, in press; Rydell, Gage, & Colnes, 1986) and elsewhere (e.g., Moya & Glenda, 1982) tends to see supervision as both insufficiently frequent and insufficiently useful. Thus, insofar as the modal resource teacher in our sample only was observed once each year, the nonsignificant effects of supervision frequency could be, in part, a statistical artifact. And the same statistical principle may have influenced the effects associated with supervision utility, albeit less

so because the problem of variance was not as pronounced for this variable. Additional studies would be helpful for appraising this possibility.

A second methodological factor to consider here reflects a limitation of the present study. Specifically, in focusing on the frequency and utility of supervision, we overlooked the important interpersonal milieu within which any supervisory practice exists and, therefore, within which any supervisory practice should be appraised. As Glickman and Bey (1990) argued, one cannot study supervision independently of such considerations as "shared understandings, clear purpose, and sensitivity to individual needs of teachers" (p. 554). By incorporating essential aspects of the interpersonal milieu into a study of this kind, subsequent researchers will move toward a better understanding of the relationship between supervision and teachers efficacy in the resource room.

We believe our results point to the promise of pursuing teacher efficacy research within the special education context. Some of this promise is in the form of born fruit -- such as the emergence of a clear personal efficacy factor -- while some of this promise represents a challenge -- exploring correlates of teacher efficacy, for example, and tackling the meaning of general efficacy. In either case, there is much to do.

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Table 1

Descriptive statistics: Means, standard deviations, and intercorrelations

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) total efficacy								
(2) personal efficacy	.85							
(3) supervision frequency	.04	.06						
(4) supervision utility	.17	.16	.17					
(5) sex	.15	.16	-.09	.03				
(6) age	.21	.17	-.02	-.03	-.01			
(7) resource-room tenure	.13	.11	-.21	-.08	.01	.41		
(8) job satisfaction	.24	.17	.02	.25	.11	.08	.02	
M	127.79	73.67	.22	.05	.86	34.24	5.61	.07
SD	12.64	7.75	.81	.89	.35	8.3	3.79	.73

Note: These statistics are based on the 378 resource teachers for whom complete data were available for the regression analyses.

Table 2
Multiple regression analysis

Dependent variable: Total Efficacy

Variable	b	SE (b)	β	T
supervision frequency	.69	.79	.04	.87
supervision utility	1.80	.72	.13	2.49*
sex	4.69	1.76	.13	2.66*
age	.27	.08	.18	3.30*
resource-room tenure	.22	.18	.07	1.22
job satisfaction	3.04	.88	.18	3.47*

Note. $R = .36$, $F(6, 371) = 9.27$, $p < \alpha$. b is the unstandardized partial slope; β is the standardized equivalent. These statistics are based on the 378 resource teachers for whom complete data were available.

*$p < \alpha$ (one-tailed).

Dependent variable: Personal Efficacy

Variable	b	SE (b)	β	T
supervision frequency	.65	.49	.07	1.33
supervision utility	1.10	.45	.13	2.44*
sex	3.26	1.10	.15	2.96*
age	.13	.05	.14	2.57*
resource-room tenure	.15	.11	.07	1.32
job satisfaction	1.18	.55	.11	2.16*

Note. $R = .31$, $F(6, 371) = 6.80$, $p < \alpha$. b is the unstandardized partial slope; β is the standardized equivalent. These statistics are based on the 378 resource teachers for whom complete data were available.

*$p < \alpha$ (one-tailed).

Appendix

The Gibson and Dembo (1984) teacher efficacy instrument, modified for use with resource teachers, is presented in the following pages. The internal-consistency reliability of the modified instrument is .77 (Cronbach's alpha). Along with each item's language, we present (a) the item-total correlation, (b) the percentage of resource teachers who agreed with the statement (circling 4, 5, or 6,), and (c) the factor loading, if greater than .40.

Negatively worded items (those appearing in bold face) were recoded before determining the item-total correlations. However, the agreement percentages are based on the item's original language, as are the factor loadings. (The items' full six-point scale was used in conducting the factor analysis.) Starred (*) items were included in the personal efficacy composite.

Directions: Below are general statements about teaching and learning in resource room programs. While resource room teachers may differ on whether they agree or disagree with any one statement, there are no right or wrong responses to any of these statements. Please indicate the degree to which you agree or disagree with each statement by circling the appropriate number below the statement.

Circle "1" if you strongly disagree with the statement;
Circle "2" if you moderately disagree with the statement;
Circle "3" if you disagree slightly more than agree with the statement;
Circle "4" if you agree slightly more than disagree with the statement;
Circle "5" if you moderately agree with the statement;
Circle "6" if you strongly agree with the statement.

*1. When one of my students does better than expected, many times it is because I exerted a little little extra effort.

item-total correlation: .20
percentage agree: 84%
Factor 1 loading: .43

2. **The time spent in my resource room program has little influence on students compared to the influence of their home environment.**

item-total correlation: .38
percentage agree: 50%
Factor 2 loading: .53

*3. If parents comment to me that their child behaves much better in my resource room program than at home, it would probably be because I have some specific techniques of managing their child's behavior which they may lack.

item-total correlation: .16
percentage agree: 87%
Factor 1 loading: .45

4. If resource room teachers have adequate skills and motivation, they can reach even the most difficult students.

item-total correlation: .38
percentage agree: 67%

5. **If students aren't disciplined at home, they aren't likely to accept any discipline in my resource room program.**

item-total correlation: .32
percentage agree: 30%
Factor 2 loading: .51

*6. I have enough training to deal with most learning problems in my resource room.

item-total correlation: .33
percentage agree: 79%
Factor 1 loading: .46

*7. Between my teacher-training program and my own teaching experience, I have obtained the necessary skills to be an effective resource room teacher.

item-total correlation: .41
percentage agree: 92%
Factor 1 loading: .52

8. **Because of lack of support from the community, I am frustrated in my attempts to help students.**

item-total correlation: .28
percentage agree: 32%
Factor 2 loading: .52

9. **Some students need to be placed in resource room programs so they are not subjected to unrealistic expectations.**

item-total correlation: -.02
percentage agree: 74%

10. Individual differences among resource room teachers in their teaching effectiveness account for the wide variation in academic achievement among resource room students.

item-total correlation: .09
percentage agree: 56%

*11. When a resource room student is having difficulty with an assignment, I am usually able to adjust it to the student's level.

item-total correlation: .36
percentage agree: 96%
Factor 1 loading: .53

12. **The amount that a special education student will learn is primarily related to family background.**

item-total correlation: .22
percentage agree: 36%
Factor 2 loading: .61

13. **If one of my new resource room students cannot remain on task for a particular assignment, there is little that I can do to increase that student's attention.**

item-total correlation: .29
percentage agree: 8%
Factor 2 loading: .45

*14. When any of my students show improvement, it is because I found better ways of teaching them.

item-total correlation: .29
percentage agree: 81%
Factor 1 loading: .58

*15. If I really try hard, I can get through to even the most difficult or unmotivated students.

item-total correlation: .44
percentage agree: 73%
Factor 1 loading: .47

16. **When all factors are considered, resource room teachers are not a very powerful influence on resource room student achievement.**

item-total correlation: .47
percentage agree: 9%
Factor 2 loading: .49

17. If my students are particularly disruptive one day, I ask myself what I have been doing differently.

item-total correlation: .22
percentage agree: 71%

*18. When the grades of my students improve, it is usually because I found more effective teaching approaches.

item-total correlation: .32
percentage agree: 90%
Factor 1 loading: .56

*19. If my supervisor suggested that I change some of my class curriculum, I would feel confident that I have the necessary skills to implement the change.

item-total correlation: .40
percentage agree: 98%
Factor 1 loading: .58

*20. If one of my students mastered a new concept concept quickly, it probably would be because I knew the necessary steps in teaching that concept.

item-total correlation: .27
percentage agree: 82%
Factor 1 loading: .57

21. **When it comes right down to it, a resource room teacher really can't do much because most of a student's motivation and performance depends on the home environment.**

item-total correlation: .49
percentage agree: 19%
Factor 2 loading: .67

22. **Parent conferences help a resource room teacher judge how much to expect from a student by giving the teacher an idea of the parents' values toward education, discipline, and so on.**

item-total correlation: .10
percentage agree: 70%
Factor 2 loading: .49

23. **If parents would do more with their children, I could do in my resource room.**

item-total correlation: .09
percentage agree: 79%
Factor 2 loading: .46

*24. If one of my students did not remember information I gave in a previous lesson, I would know how to increase the student's retention in the next lesson.

item-total correlation: .37
percentage agree: 82%
Factor 1 loading: .52

*25. If students in my class become disruptive and noisy, I feel assured that I know some techniques to redirect them quickly.

item-total correlation: .45
percentage agree: 94%
Factor 1 loading: .50

26. **School policies and special education regulations hinder my doing the job I was hired to do.**

item-total correlation: .18
percentage agree: 53%

27. The influences of a special education student's home experience can be overcome by good teaching.

item-total correlation: .40
percentage agree: 63%
Factor 2 loading: -.41

28. When a student progresses after being placed in a resource room program, it is usually because the resource room teacher has had a chance to give the student extra attention.

item-total correlation: .19
percentage agree: 95%

*29. If one of my special education students couldn't do a class assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty.

item-total correlation: .39
percentage agree: 56%
Factor 1 loading: .60

30. **Even a resource room teacher with good teaching abilities may not reach many students.**

item-total correlation: .33
percentage agree: 51%
Factor 2 loading: .44